

ACTA MECHANICA

EDITED BY

S. LEIBOVICH, ITHACA, N.Y.

H. TROGER, WIEN

G. J. WENG, NEW BRUNSWICK, N. J.

F. ZIEGLER, WIEN

J. ZIEREP, KARLSRUHE

VOL. 88, 1991

ISSN 0001-5970



SPRINGER-VERLAG

WIEN · NEW YORK

Acta Mechanica

Advisory Board

H. Bednarczyk, Stuttgart
E. Brommundt, Braunschweig
H. Bufler, Stuttgart
B.-T. Chu, New Haven, Conn.
J. Dundurs, Evanston, Ill.
U. Gamer, Wien
P. Haupt, Kassel
C. S. Hsu, Berkeley, Calif.
K. Hutter, Darmstadt
Z. Mróz, Warschau

H. Oertel, Braunschweig
J.-Y. Parlange, Brisbane
A. Prechtel, Wien
F. G. Rammerstorfer, Wien
B. Schmidt, Karlsruhe
W. Schneider, Wien
B. Straughan, Glasgow
T. R. Taichert, London
J. R. Willis, Bath
J. L. Zeman, Wien

Editorial Secretaries: W. Mack and P. Mittermayr, Wien

The exclusive copyright for all languages and countries,
including the right for photomechanical and any other reproductions
including microform is transferred to the publisher
© 1991 by Springer-Verlag/Wien

Acta Mechanica

Vol. 88, 1991

Contents

Contributed Papers

- Arminjon, M.:** Limit distributions of the states and homogenization in random media 27–59
- Arminjon, M., Bacroix, B.:** On plastic potentials for anisotropic metals and their derivation from the texture function 219–243
- Boutros, Y. Z., Abd-el-Malek, M. B., Tewfick, A. H.:** A formal expansion procedure for the internal solitary wave problem in a two-fluid system of constant topography 175–197
- Chaturani, P., Ranganatha, T. R.:** Flow of Newtonian fluid in non-uniform tubes with variable wall permeability with application to flow in renal tubules 11–26
- Filip, P., Kolář, V., Hájek, R.:** Similarity prediction of wall jets past axisymmetric bodies for power-law fluids 167–173
- Garg, V. K., Rajagopal, K. R.:** Flow of a non-Newtonian fluid past a wedge 113–123
- Jiang, Q.:** Determination of the near-tip stress fields for the scattering of P-waves by a crack 199–204
- Kailbauer, F., Gretler, W.:** Perturbation solutions for blast waves with convective and radiative heat transfer 127–140
- Karahalios, G. T., Petrakis, M. A.:** Fully developed steady flow in a slightly curved annular pipe 1–10
- Kluwick, A.:** Weakly nonlinear kinematic waves in suspensions of particles in fluids 205–217
- Sharma, V. D., Sharma, R. R., Pandey, B. D., Gupta, N.:** Non-linear wave propagation in a hot-electron plasma 141–152
- Trogdon, S. A., Farmer, M. T.:** Unsteady axisymmetric creeping flow from an orifice 61–75
- Venkatachalappa, M., Rudraiah, N., Sachdev, P. L.:** Propagation of quasi-simple waves in a compressible rotating atmosphere 153–166

- Voyiadjis, G. Z., Kattan, P. I.:** Phenomenological evolution equations
for the backstress and spin tensors 91—111
- Wendlandt, B. C. H.:** Wave equation system for dilatation and torsion
for piecewise continuous materials 77—89

Notes

- Baczyński, Z. F.:** On modelling thermoelastic processes in layered com-
posites 245—251
- Sasic, M., Sasic, R.:** One more general method for solving Oseen's
equations 253—265

Listed in **Current Contents, Mechanics**

Reviewed in **Applied Mechanics Reviews** and **Mathematical Reviews**

and **Zentralblatt für Mathematik und ihre Grenzgebiete/Mathematics Abstracts**

